

SOLICITATION, OFFER, AND AWARD (Continued) <i>(Construction, Alteration, or Repair)</i>										
OFFER (Must be fully completed by offeror)										
14. NAME AND ADDRESS OF OFFEROR <i>(Include ZIP Code)</i>					15. TELEPHONE NO. <i>(Include area code)</i>					
CODE FACILITY CODE					16. REMITTANCE ADDRESS <i>(Include only if different than Item 14)</i> See Item 14					
					17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. <i>(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)</i>					
AMOUNTS		SEE SCHEDULE OF PRICES								
18. The offeror agrees to furnish any required performance and payment bonds.										
19. ACKNOWLEDGMENT OF AMENDMENTS <i>(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)</i>										
AMENDMENT NO.										
DATE										
20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i>					20B. SIGNATURE			20C. OFFER DATE		
AWARD (To be completed by Government)										
21. ITEMS ACCEPTED:										
22. AMOUNT		23. ACCOUNTING AND APPROPRIATION DATA								
24. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 copies unless otherwise specified)</i>				ITEM	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c) <input type="checkbox"/> 41 U.S.C. 253(c)					
26. ADMINISTERED BY			CODE		27. PAYMENT WILL BE MADE BY: CODE					
CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE										
<input type="checkbox"/> 28. NEGOTIATED AGREEMENT <i>(Contractor is required to sign this document and return _____ copies to issuing office.)</i> Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract.					<input type="checkbox"/> 29. AWARD <i>(Contractor is not required to sign this document.)</i> Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.					
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN <i>(Type or print)</i>					31A. NAME OF CONTRACTING OFFICER <i>(Type or print)</i>					
30B. SIGNATURE			30C. DATE		TEL: EMAIL:			31B. UNITED STATES OF AMERICA BY		31C. AWARD DATE

Section 00010 - Solicitation Contract Form

The contractor shall provide all labor, supplies, and necessary equipment for the Remove of Old and Replacement of a New Fire Alarm System in Building 7179, Fort Campbell, Kentucky in accordance with the Specifications and Drawing contained herein.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	AMOUNT
0001		1	Lump Sum	\$ _____
	Replace Existing Fire Alarm System, Bldg 7179, Fort Campbell, KY as Specified Herein, Fort Campbell, Kentucky			

Basis for Award:

Award will be made to the offeror who is considered to be responsible and responsive and who submits the lowest quoted price.

Section 00100 - Bidding Schedule/Instructions to Bidders

CLAUSES INCORPORATED BY REFERENCE

52.225-10	Notice of Buy American Act Requirement--Construction Materials	MAY 2002
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2004

CLAUSES INCORPORATED BY FULL TEXT

52.204-7 CENTRAL CONTRACTOR REGISTRATION (OCT 2003) ALTERNATE I (OCT 2003)

(a) Definitions. As used in this clause--

Central Contractor Registration (CCR) database means the primary Government repository for Contractor information required for the conduct of business with the Government.

Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same parent concern.

Registered in the CCR database means that--

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and

(2) The Government has validated all mandatory data fields and has marked the record "Active".

(b)(1) The Contractor shall be registered in the CCR database by (Contracting Officer shall insert a date no later than December 31, 2003) . The Contractor shall maintain registration during performance and through final payment of this contract.

(2) The Contractor shall enter, in the block with its name and address on the cover page of the SF 30, Amendment of solicitation/Modification of Contract, the annotation "DUNS" or "DUNS +4" followed by the DUNS or DUNS +4 number that identifies the Contractor's name and address exactly as stated in this contract. The DUNS number will be used by the Contracting Officer to verify that the Contractor is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number--

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at <http://www.dnb.com>; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company Physical Street Address, City, State, and Zip Code.

(iv) Company Mailing Address, City, State and Zip Code (if separate from physical).

(v) Company Telephone Number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)(1)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of Subpart 42.12 of the FAR; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that

Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423, or 269-961-5757.

(End of clause)

52.211-2 AVAILABILITY OF SPECIFICATIONS, STANDARDS, AND DATA ITEM DESCRIPTIONS LISTED IN THE ACQUISITION STREAMLINING AND STANDARDIZATION INFORMATION SYSTEM (ASSIST) (JAN 2006)

(a) Most unclassified Defense specifications and standards may be downloaded from the following ASSIST websites:

(1) ASSIST (<http://assist.daps.dla.mil>);

(2) Quick Search (<http://assist.daps.dla.mil/quicksearch>);

(3) ASSISTdocs.com (<http://assistdocs.com>).

(b) Documents not available from ASSIST may be ordered from the Department of Defense Single Stock Point (DoDSSP) by--

(1) Using the ASSIST Shopping Wizard (<http://assist.daps.dla.mil/wizard>);

(2) Phoning the DoDSSP Customer Service Desk (215) 697-2179, Mon-Fri, 0730 to 1600 EST; or

(3) Ordering from DoDSSP, Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(End of provision)

52.215-5 FACSIMILE PROPOSALS (OCT 1997)

(a) Definition. Facsimile proposal, as used in this provision, means a proposal, revision or modification of a proposal, or withdrawal of a proposal that is transmitted to and received by the Government via facsimile machine.

(b) Offerors may submit facsimile proposals as responses to this solicitation. Facsimile proposals are subject to the same rules as paper proposals.

(c) The telephone number of receiving facsimile equipment is: **(270) 798-3987**.

(d) If any portion of a facsimile proposal received by the Contracting Officer is unreadable to the degree that conformance to the essential requirements of the solicitation cannot be ascertained from the document--

(1) The Contracting Officer immediately shall notify the offeror and permit the offeror to resubmit the proposal;

(2) The method and time for resubmission shall be prescribed by the Contracting Officer after consultation with the offeror; and

(3) The resubmission shall be considered as if it were received at the date and time of the original unreadable submission for the purpose of determining timeliness, provided the offeror complies with the time and format requirements for resubmission prescribed by the Contracting Officer.

The Government reserves the right to make award solely on the facsimile proposal. However, if requested to do so by the Contracting Officer, the apparently successful offeror promptly shall submit the complete original signed proposal.

(End of provision)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
18.2	6.9

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is **FORT CAMPBELL, KY CHRISTIAN COUNTY**

(End of provision)

52.233-2 SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

Directorate of Contracting
Construction/Engineer Division
Building 2176, 13 ½ Street
Fort Campbell, Kentucky 42223

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting:

Name: Angela Jacobs or Tracey Mueller

Address: **Building 2176, 13 ½ Street, Fort Campbell, Kentucky 42223**

Telephone: **(270) 798-0380 or (270) 798-7833**

(End of provision)

52.236-28 PREPARATION OF PROPOSALS--CONSTRUCTION (OCT 1997)

(a) Proposals must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a proposal must initial each erasure or change appearing on any proposal form.

(b) The proposal form may require offerors to submit proposed prices for one or more items on various bases, including--

- (1) Lump sum price;
 - (2) Alternate prices;
 - (3) Units of construction; or
 - (4) Any combination of paragraphs (b)(1) through (b)(3) of this provision.
- (c) If the solicitation requires submission of a proposal on all items, failure to do so may result in the proposal being rejected without further consideration. If a proposal on all items is not required, offerors should insert the words “no proposal” in the space provided for any item on which no price is submitted.
- (d) Alternate proposals will not be considered unless this solicitation authorizes their submission.
- (End of provision)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

www.farsite.hill.af.mil

(End of provision)

252.211-7002 AVAILABILITY FOR EXAMINATION OF SPECIFICATIONS, STANDARDS, PLANS, DRAWINGS, DATA ITEM DESCRIPTIONS, AND OTHER PERTINENT DOCUMENTS (DEC. 1991)

The specifications, standards, plans, drawings, data item descriptions, and other pertinent documents cited in this solicitation are not available for distribution but may be examined at the following location:

DIRECTORATE OF PUBLIC WORKS
BLDG 865
FORT CAMPBELL, KY 42223

FOR SEPCIFICATION AND DRAWINGS:

DIRECTORATE OF CONTRACTING
BLDG 2176
FORT CAMPBELL, KY 42223

(End of Clause)

INSTRUCTIONS TO BIDDERS

INSTRUCTION TO QUOTERS

a. **CONDITIONS AFFECTING THE WORK** - Quoters should visit the site and take such other steps as may be reasonably necessary to ascertain the nature and location of the work, and the general and local conditions which can affect the work or the cost thereof. Failure to do so will not relieve quoters from responsibility for estimating properly the difficulty or cost of successfully performing the work. The Government will assume no responsibility for any understanding or representations concerning conditions made by any of its officers or agents prior to the execution of the contract, unless included in the Request for Quotations, the specifications or related documents.

b. **QUOTER'S QUALIFICATIONS** - To establish its responsibility, the quoter may be requested by the Government to submit a statement regarding his previous experience in performing comparable work, his business and technical organization, financial resources, and plant available to be used in performing the work.

c. **QUOTER'S ADDRESS** - Prospective quoters should indicate in the quote, the address to which payment and/or correspondence should be mailed, if such address is different from that shown for the quoter.

d. **CONTRACT AND BONDS.** The bidder whose bid is accepted will, within the time established in the bid, furnish performance and payment bonds on Government Standard Forms in the amounts indicated in the Invitation for Bids or the specifications.

e. **MODIFICATIONS PRIOR TO DATE SET FOR OPENING QUOTES** - The right is reserved as the interest of the Government may require, to revise or amend the specifications or drawings or both prior to the date set for opening QUOTES. Such revisions and amendments, if any, will be announced by an amendment or amendments to this Request for Quotation. If the revisions and amendments are of a nature which requires material changes in quantities or prices quote or both, the date set for opening quotes may be postponed by such number of days as in the opinion of the issuing officer will enable quoters to revise their quotes. In such cases, the amendment will include an announcement of the new date for opening quotes.

f. **UTILITIES** - Utility services (reasonable amounts of water and electricity) required on the job site for accomplishment of the work will be furnished at not cost to the contractor; however, the Government will make no connections or alterations to the existing utility facilities for accomplishment of this work and any changes required by the contractor will be at his expense and at no additional cost to the Government. Utilities for office and/or storage buildings or areas will be billed to the contractor monthly and will not be furnished free of charge.

g. **QUOTING MATERIAL** - Specifications, drawings and bid forms can be obtained at no cost from the Directorate of Contracting Home Page at <http://doc.campbell.army.mil>.

h. NOTICE TO OFFERORS - USE OF CLASS I OZONE-DEPLETING SUBSTANCES

(1) In accordance with Section 326 of P.L. 102-484, the Government is prohibited from awarding any contract which includes a specification or standard that requires the use of a Class I ozone-depleting substance (ODS) identified in Section 602(a) of the Clean Air Act, (42 U.S.C. 767a(a)), or that can be met only through the use of such a substance unless such use has been approved, on an individual basis, by a senior acquisition official who determines that there is no suitable substitute available.

(2) To comply with this statute, the Government has conducted a best efforts screening of the specifications and standards associated with this acquisition to determine whether they contain any ODS requirements. To the extent that ODS requirements were revealed by this review, they are identified below with the disposition determined in each case.

(3) If offerors possess any special knowledge about any other ODSs required directly or indirectly at any level of contract performance, the U.S. Army would appreciate if such information was surfaced to the Contracting

Officer for appropriate action. To preclude delay to the procurement, offerors should provide any information as soon as possible after release of this solicitation and prior to the submission of offers to the extent practicable. It should be understood that there is no obligation on offerors to comply with this request and that no compensation can be provided for doing so.

ODS Identified Specification/Standard Disposition

None

i. **NOTICE** - The following bid information is applicable only if proposal is over one hundred thousand dollars (\$100,000):

(1) **BID BONDS:** This is applicable only if proposal is over one hundred thousand dollars (\$100,000). Each bidder shall submit with his bid a Bid Bond (Standard Form 24) with good and sufficient surety or sureties acceptable to the Government in the form of twenty percent (20%) of the bid price or three million dollars (\$3,000,000) whichever is lesser. The bid bond penalty may be expressed in terms of a percentage or may be expressed in dollars and cents.

(2) **PERFORMANCE BONDS.** The penal amount of the performance bond shall equal one hundred percent (100%) of the contract price.

(3) **PAYMENT BONDS:** Within ten (10) days after receipt of contract award to the bidder whom award is made, one (1) bond, with good and sufficient surety or sureties acceptable to the Government, shall be furnished; namely a Payment Bond (Standard Form 25A). The penal amount of such bonds shall be as follows:

“The penal amount will be one hundred percent (100%) of the contract price.”

(4) The following information is applicable only if offer is between twenty-five thousand dollars (\$25,000.00) and one hundred thousand dollars (\$100,000.00). The following payment protections shall be submitted by the contractor:

- a. A Payment Bond
- b. An irrevocable letter of credit (ILC)

(3) **INDIVIDUAL SURETIES** will not be accepted for construction contracts. Only bonds from corporation or financial institutions will be recognized as responsive to the submission for bid bonds or performance and payment bonds. Prospective contractors whose bids are accompanied by an Individual Surety will therefore be rejected as nonresponsive and not considered for award.

j. **EXPLANATION OF PROVISION/CLAUSE NUMBERS UTILIZED IN THIS SOLICITATION:**

(1) When the seventh digit of the provision/clause number is a "0", this indicates a provision/clause from the Federal Acquisition Regulation (FAR), e.g., 52.0252-0007.

(2) Where the seventh digit of a provision/clause number is a "7", this indicates a provision/clause from the Defense Acquisition Regulation Supplement (DFARS), e.g., 52.252-7007.

(3) Where the seventh digit of a provision/clause number is a "9", this indicates a provision/clause from the Army Federal Acquisition Regulation Supplement (AFARS), e.g., 52.0252-9007.

SUBJECT TO AVAILABILITY OF FUNDS. Funds are not presently available for this acquisition. No contract award will be made until appropriated funds are made available from which payment for contract purposes can be made.

Section 00600 - Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2005)

(a)(1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (b) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (b) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

☐ Paragraph (b) applies.

☐ Paragraph (b) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(b) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change
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Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Provision)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil>

(End of provision

CORPORATE CERTIFICATE

CORPORATE CERTIFICATE (The same officer shall not execute both the contract and the certificate.)

I, _____, certify that I am the _____ of the corporation named as contractor herein; that _____ who signed this contract on behalf of the contractor was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

CORPORATE SEAL

Signature

Title

Date

**WHEN CONTRACTOR IS AN INDIVIDUAL, PARTNERSHIP OR UNINCORPORATED FIRM,
COMPLETE THE FOLLOWING STATEMENT:**

I, _____, the undersigned represents the organization named as contractor herein, and am empowered to sign on behalf of said contractor by authority of and for the owner, partners or governing body of such unincorporated firm.

The following are the full names of all partners.

Name:
Name:
Name:

Signature and Title

Name of Bidder or Contractor

Date

Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.203-3	Gratuities	APR 1984
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JAN 2005
52.222-3	Convict Labor	JUN 2003
52.222-6	Davis Bacon Act	JUL 2005
52.222-7	Withholding of Funds	FEB 1988
52.222-8	Payrolls and Basic Records	FEB 1988
52.222-9	Apprentices and Trainees	JUL 2005
52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	JUL 2005
52.222-12	Contract Termination-Debarment	FEB 1988
52.222-13	Compliance with Davis-Bacon and Related Act Regulations.	FEB 1988
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	FEB 1988
52.222-26	Equal Opportunity	APR 2002
52.222-27	Affirmative Action Compliance Requirements for Construction	FEB 1999
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans	DEC 2001
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans	DEC 2001
52.223-5	Pollution Prevention and Right-to-Know Information	AUG 2003
52.225-9	Buy American Act--Construction Materials	JAN 2005
52.227-4	Patent Indemnity-Construction Contracts	APR 1984
52.228-2	Additional Bond Security	OCT 1997
52.228-5	Insurance - Work On A Government Installation	JAN 1997
52.228-11	Pledges Of Assets	FEB 1992
52.228-12	Prospective Subcontractor Requests for Bonds	OCT 1995
52.228-13	Alternative Payment Protections	JUL 2000
52.228-14	Irrevocable Letter of Credit	DEC 1999
52.228-15	Performance and Payment Bonds--Construction	SEP 2005
52.232-5	Payments under Fixed-Price Construction Contracts	SEP 2002
52.232-17	Interest	JUN 1996
52.232-23 Alt I	Assignment of Claims (Jan 1986) - Alternate I	APR 1984
52.232-27	Prompt Payment for Construction Contracts	SEP 2005
52.232-33	Payment by Electronic Funds Transfer--Central Contractor Registration	OCT 2003
52.233-1	Disputes	JUL 2002
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984

52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	APR 1984
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13	Accident Prevention	NOV 1991
52.236-14	Availability and Use of Utility Services	APR 1984
52.236-15	Schedules for Construction Contracts	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21 Alt I	Specifications and Drawings for Construction (Feb 97) - Alternate I	APR 1984
52.236-26	Preconstruction Conference	FEB 1995
52.242-14	Suspension of Work	APR 1984
52.243-5	Changes and Changed Conditions	APR 1984
52.244-6	Subcontracts for Commercial Items	DEC 2004
52.246-12	Inspection of Construction	AUG 1996
52.246-21	Warranty of Construction	MAR 1994
52.249-1	Termination For Convenience Of The Government (Fixed Price) (Short Form)	APR 1984
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.223-7006	Prohibition On Storage And Disposal Of Toxic And Hazardous Materials	APR 1993
252.225-7031	Secondary Arab Boycott Of Israel	JUN 2005
252.227-7033	Rights in Shop Drawings	APR 1966
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7003	Electronic Submission of Payment Requests	JAN 2004
252.243-7001	Pricing Of Contract Modifications	DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within 3 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 45 calendar days. The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$204.78 for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the

Termination clause.

(End of clause)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil>

(End of clause)

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall--

(1) Check all drawings furnished immediately upon receipt;

- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

- (1) Large-scale drawings shall govern small-scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title	File	Drawing No.
-------	------	-------------

Removal of Old and Installation of New Fire Alarm System, Building 7179, Fort Campbell, Kentucky Drawing Number 7633, Five Sheets		
--	--	--

(End of clause)

252.247-7023 Transportation of Supplies by Sea (MAY 2002)

(a) Definitions. As used in this clause --

- (1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.
- (2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.
- (3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.
- (4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.
- (5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.
- (6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--

(i) This contract is a construction contract; or

(ii) The supplies being transported are--

(A) Noncommercial items; or

(B) Commercial items that--

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --

(1) Type, weight, and cube of cargo;

(2) Required shipping date;

(3) Special handling and discharge requirements;

(4) Loading and discharge points;

(5) Name of shipper and consignee;

(6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Maritime Administration, Office of Cargo Preference, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information:

(1) Prime contract number;

(2) Name of vessel;

(3) Vessel flag of registry;

(4) Date of loading;

(5) Port of loading;

(6) Port of final discharge;

(7) Description of commodity;

(8) Gross weight in pounds and cubic feet if available;

(9) Total ocean freight in U.S. dollars; and

(10) Name of the steamship company.

(f) The Contractor shall provide with its final invoice under this contract a representation that to the best of its knowledge and belief--

(1) No ocean transportation was used in the performance of this contract;

(2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY
_____	_____	_____
_____	_____	_____
_____	_____	_____
TOTAL	_____	_____

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:

(1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(End of clause)

252.247-7024 Notification of Transportation of Supplies by Sea (MAR 2000)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--

(1) In all subcontracts under this contract, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

Section 00800 - Special Contract Requirements

SPECIAL PROVISIONS**W91248-06-Q-0030****SECTION 00800
SPECIAL CONTRACT REQUIREMENTS
SPECIAL PROVISIONS****SP 1. WORK HOURS.**

a. Normal work hours are from 7:30 A.M. through 4:00 P.M., Monday through Friday. Contractors will not be permitted to work after normal work hours or on Saturday, Sunday or legal holidays unless authorized by the Contracting Officer. However, Saturday, Sunday and legal holidays and any work after normal work hours are included in computation of performance time.

New Year's Day	Labor Day
Martin Luther King, Jr.'s Birthday	Columbus Day
President's Day	Veteran's Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

b. When one of the above designated legal holidays falls on Sunday, the following Monday will be observed as a legal holiday. When a legal holiday falls on a Saturday, the preceding Friday is observed as a holiday by U.S. Government agencies.

SP 2. FIRE PREVENTION. The Contractor shall comply with fire prevention practices as set forth by the National Fire Protection Association and other recognized fire prevention agencies and post regulations.

SP3. PREPARATION OF PROGRESS SCHEDULES AND REPORTS. The report contemplated by the clause entitled "Schedules for Construction Contracts" shall be accomplished on and in accordance with instructions pertaining to FORSCOM Form 59-R, "Contract Progress Report", original and two copies. Progress reports shall be submitted weekly.

SP4. CONTRACT PROGRESS REPORTS. The contractor and the Director of Public Works' Inspector assigned to the project shall submit a separate FORSCOM Form 59-1-R, "Contract Progress Report", complete, signed and dated to the Contracting Officer. These reports will be reviewed by the Contracting Officer and action taken to resolve any variances in the two reports. The contractor shall also submit an original to the Contracting Officer's Representative accompanied by a brief narrative report of work accomplished.

SP 5. TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATIONS.

a. All materials and equipment for which approval is required by the provisions, as contemplated by the "Materials and Workmanship" clause herein, shall be submitted by the Contractor within 10 days after receipt of Notice to Proceed and approval obtained prior to the Contractor incorporating said materials and articles in the work. Other submittals shall be submitted by the Contractor 10 days prior to beneficial use or final acceptance, whichever occurs first.

b. All data submittals required by this contract shall be submitted by the Contractor by means of Corps of Engineers Form ENG 4025R, "Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certifications". Unless specified elsewhere, all data submittals shall be in four (4) copies.

SP 6. REQUIRED MATERIAL SUBMITTALS. Pursuant to Paragraph #5, "Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certification", the following paragraphs of the provisions require Contracting Officer's approval of materials the Contractor contemplates incorporating in the work. All materials installed or used without required approval shall be at the risk of subsequent rejection and tearout. (See Contract Clause entitled "Material and Workmanship" (APR 1984) (FAR 52.236-5)).

TECHNICAL PROVISION DESCRIPTION/ PARAGRAPH NUMBER	PAGE	DESCRIPTION
See End of Specifications for Submittal Register		

SP 7. SCHEDULE OF INSURANCE.

a. The Contract shall, at its own expense, provide and maintain during the entire performance period of this contract at least the kinds and minimum amounts of insurance required below:

Workmen's Compensation and Employer's Liability Insurance	\$100,000.00
General Liability Insurance for Bodily Injury Liability:	
Minimum Per Occurrence	\$500,000.00
Automobile Liability Insurance:	
Minimum Per Person	\$200,000.00
Minimum Per Occurrence for Bodily Injury	\$500,000.00
Minimum Per Occurrence for Property Damage	\$ 20,000.00

b. Before commencing work under this contract, the Contractor shall certify to the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the state in which this contract is to be performed or prescribed and (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

c. The Contractor shall insert the substance of the clause, entitled "Insurance - Work on a Government Installation (FAR 52.228-5)," in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required above.

SP 8. ALTERNATIVE DISPUTE RESOLUTION (ADR). "In furtherance of Federal policy and the Administrative Dispute Resolution Act of 1990, ADR Act, Pub. L. 101-552, the Contracting Officer will try to resolve all post award acquisition issues in controversy by mutual agreement of the parties. Interested parties are encouraged to use alternative dispute resolution procedures to the maximum extent practicable in accordance with the authority and the requirements of the ADR Act."

SECTION 00900**General Decision Number KY030005** 04/07/2006

General Decision Number **KY030005**
 Superseded General Decision No. **KY020005**
 State: Kentucky

Construction Type: BUILDING

County(ies): CHRISTIAN

BUILDING CONSTRUCTION PROJECTS (Does not include residential construction consisting of single family homes and apartments to and including 4 stories) in FORT CAMPBELL ONLY

Modification Number	Publication Date
0	06/13/2003
1	10/31/2003
2	03/05/2004
3	05/14/2004
4	08/13/2004
5	11/19/2004
6	02/04/2005
7	07/08/2005
8	01/13/2006
9	04/07/2006

ENGI0181-026 07/01/2005

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Crane	21.85	10.40
Roller		
Bituminous	21.85	10.40
Roller		
Earth	18.34	10.40
Roller		
Rock	19.11	10.40
Scraper	21.85	10.40

CRANE WITH BOOM 150 FEET AND OVER, INCLUDING JIB, SHALL RECEIVE \$1.00 ABOVE GROUP 1; 225 FEET AND OVER, INCLUDING JIB, SHALL RECEIVE \$1.50 ABOVE GROUP 1. CRANE USING PILING LEADS SHALL RECEIVE \$1.00 ABOVE GROUP 1 REGARDLESS OF BOOM LENGTH

HAZARDOUS PAY:

Personal Protective Equipment:

Level A \$1.00 Premium
 Level B \$.75 Premium
 Level C \$.50 Premium
 Level D No Premium

 PLUM0184-003 07/01/2005

Rates Fringes

PLUMBERS & STEAMFITTERS

(Including HVAC work: excluding fire 7.05 11.65
sprinkler systems)

SFKY0669-001 04/01/2006			
		Rates	Fringes
SPRINKLER FITTERS		25.05	11.00

SUKY2002-002 10/16/2002			
		Rates	Fringes
BRICK/BLOCK MASON		20.31	1.51
CARPENTERS (Including formwork,			
Cabinet installation and installation of			
Overhead doors)			14.76 4.04
ELECTRICIAN (excluding low voltage			
Voltage wiring for HVAC			25.12 4.63
IRONWORKER - Structural (excluding metal			
Building and fence erection)			22.60 2.60
LABORER:			
Mason Tender	19.65		
Unskilled			13.85 3.60
POWER EQUIPMENT OPERATOR:			
Bulldozer			19.20
Forklift			19.09 2.44
ROOFER	11.55		1.14
SHEET METAL WORKER:			
Excluding HVAC Duck Work			
And Metal Building Erection			14.70 4.28
HVAC Duck Work			24.98 1.98

WELDERS - Receive rate prescribed for craft performing operation to which
welding is incidental.

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Unlisted classifications needed for work not included within the scope of
the classifications listed may be added after award only as provided in the
labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under
that identifier do not reflect collectively
bargained wage and fringe benefit rates. Other designations indicate unions
whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a
wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

SECTION 01000**Section 01000****Project No. FE 10267 5J****Replace Fire Alarm System, Building 7179****FORT CAMPBELL, KENTUCKY**

1.0 Scope of Work: The work covered by these specifications consist in furnishing all plant, labor, equipment, appliances, and materials in performing all operations in connection with the replacement of the obsolete fire alarm system in Building 7179. Building 7179 is located in Kentucky.

1.1 This work shall be in strict accordance's with these specifications and any special conditions, which are subject to the terms and conditions of this contract. Fire Alarm installation shall be IAW Section 13850A (attached)

1.2. Demo existing fire alarm panel and existing devices.

1.3 Provide and install a new MS 9200 Fire-Lite fire alarm control panel, or equal wired for zone addresses. Existing panel is located in the mechanical room. Power may be obtained from the existing line voltage alarm panel circuit or a new circuit shall be provided.

1.4 New alarm control panel shall be compatible with the King Fisher Transmitter and be able to transmit trouble signals as well as master alarm signals.

1.5 King Fisher transmitter, antenna and batteries for the King Fisher shall be provided by the Government. Contractor shall provide any other material necessary for a complete installation. Installation shall be IAW these specifications and the attached drawing.

1.5.1 Mount Transmitter unit 48" AFF to center of cabinet

1.5.2 Connect New Fire Alarm Panel and new transmitter panel to the 120v power source serving existing alarm

1.5.3 Transmitter shall be wired to provide full supervision of field wiring; new unit shall monitor and transmit trouble for each active zone of the alarm panel.

1.5.4 The Government shall program the King Fisher transmitter prior to acceptance testing.

1.6 Furnish and install devices including but not limited to pull stations, smoke detectors, heat detectors, horn/strobes, etc in the building for a complete installation.

1.7 RESERVED

1.8 Furnish and install smoke detectors, horn/ strobe devices and pull stations to comply with NFPA 72 and NFPA 101.

1.9 Furnish and install heat detectors where required by NFPA or as indicated on the drawings.

1.10 Furnish and install heat detectors, horn/strobes and pull stations in the mechanical room. Horn/strobe and pull station shall be weatherproof and heat detectors shall be 195 degree devices in the mechanical room.

1.11 A qualified fire alarm technician shall perform acceptance testing IAW NFPA 72 in the presence of the COR, Fire Department representative and Contracting Officer.

1.12 Prior to any work the contractor shall provide shop drawings for approval.

1.13 MATERIALS FURNISHED: King Fisher Transmitter, batteries and antenna for transmitter to function

1.14 UTILITIES: Utility services required on this job site for the accomplishment of the work will be furnished at no cost to the contractor. However, the government will make no connections or alterations to the existing utility facilities for accomplishment of the work and any changes required by the contractor will be at his own expense and at no cost to the government.

1.15 CLEAN UP: The contractor will clean up so that the area will be free of debris caused by the modifications to the building by this contract.

1.16 COR: The contractor shall coordinate all his work and scheduling with the Contracting Officer's Representative (COR). The contractor shall notify the COR (in writing), a minimum of forty eight (48) hours in advance of commencing work.

1.17 SUBMITTALS:

Material submittals will be required as indicated in Specifications or as required for the following items or where an OR EQUAL product is being submitted for substitution.

1.18 Site Specific Spill Plan

1.19 Fire alarm Control Panel manufacture's cut sheets, including installation, maintenance and troubleshooting manuals and any the information necessary for approval.

1.20 Fire alarm Technician qualifications

1.21 Shop Drawings

1.22 Devices

1.23 Electric Permit

1.24 Fire Alarm Certification per NFPA 72

1.25 Red-line drawings indicating correct location of devices, junction boxes etc.

1.26 Fire Alarm System Record of Completion per NFPA 72 chapter 4.5

1.27 Copies of programming software (CD's) Compatible with Government laptop computers. Software shall be compatible with Windows operating systems 98, 2000 and XP.

1.28 Any cable, adaptor key or other required to connect Government lap top computer to panels in the event of failure.

1.29 One (1) year written warranty

1.30 The contractor shall submit an individual certification from the manufacturer that each and every material component used in this project is 100% asbestos-free.

2.0 **SPECIAL CONDITIONS:**

2.1 The Contractor is responsible for knowledge of and compliance with all environmental laws, regulations, and programs of this installation, the County, State and Federal agencies that relate to or may arise under the performance of this contract. Included, but not limited to its compliance with applicable standards for the prevention, control and abatement of environmental pollution in full cooperation with the Installation, Federal, State and Local Governments.

2.1.1 Penalty charges resulting from citations against Department of Defense, Department of the Army or Fort Campbell, Kentucky or its agents, officers or employees due to the Contractor's failure to comply with environmental laws, regulations and programs, that relate to or may arise under the performance of this contract may be deducted or offset by the Government from any monies due the Contractor, and with respect to such citations, the Contractor will further take any corrective or remedial actions as directed by such agencies.

2.2 The Contractor's warranty shall last one (1) full year unless otherwise noted from the date of acceptance of the final unit completed under this contract. Any rework shall be done at no additional cost to the Government.

(Provide written warranty)

2.3 PERMITS: Contractor is required to have electrical permits prior to any work involving the installation. **(Provide one (1) copy to the inspector upon receipt of permits, before any construction occurs. Completed approved permit shall be part of final submittals.)**

2.3.1 Electrical: No electric equipment shall be installed within or on any Fort Campbell building, structure, or premises, nor shall any alteration or addition be made in any such existing equipment without first securing an Electrical Permit (FC Form 4183) from the Fort Campbell Electrical Inspector in accordance with Fort Campbell Public Works Business Center Standing Operating Procedure (SOP) 308, except as provided within said SOP. Copies of SOP can be obtained from the COR.

2.3.2 Special Electrical Note: Regardless of the electrical characteristics stated in the description of proposed equipment, fixtures, switches, motors, controllers, panels, transformers, etc., the Contractor shall verify voltage and phase existing in the field prior to placing any order or making any purchase. All items and/or accessories indicated above shall be compatible (whether new or existing) and fulfill the intent of the specifications. Discrepancies and/or variations in characteristics will not relieve the Contractor from furnishing proper items at no additional cost to the Government.

2.4 Conduct & Dress: Workers shall be properly attired at all times. Full-length pants (no shorts), shirts (tee-shirt minimum), and proper shoes (no flip-flops, thongs, or open-toed sandals) are required. No smoking in buildings. Department of the Army Smoking Policy (AR 1-8) shall be observed. Smoking shall be permitted in designated areas only. Smoking allowed outside as long as butts, wrappers, packages, etc., are policed daily. The Contractor shall ensure that all lunch and break times debris are contained and removed from the site at the end of each period and properly disposed of as specified. Profanity is strictly forbidden. Only necessary company operational vehicles shall be driven to project site.

2.5 All debris, equipment, tools, supplies, etc., shall be removed or stored in such a manner as not to interfere with the use of the facility.

2.5.1 **Disposition Of Materials:** Disposal of materials and equipment is the responsibility of the Contractor at locations as specified. No materials or equipment shall be removed from Government property without written permission from the proper authorities. Miscellaneous Metals and Scrap Rubber shall be delivered to DRMO for recycling. The metals can be steel, aluminum, brass, copper and bronze. Empty containers (55 gallon drums, 5 gallon cans, etc.) that have contained petroleum, antifreeze, paint, acid, etc. cannot be accepted as scrap metal and

shall be emptied of any liquid contents in accordance with applicable regulations and then flatten and placed in dumpsters at the convenience centers.

2.6 All work shall be done during the hours of 7:30 a.m. to 4:00 p.m., Monday thru Friday unless coordinated and approved through the COR.

2.7 ENVIRONMENTAL ISSUES:

2.7.1 Contractor shall provide a written site specific spill plan IAW Ft. Campbell Environmental rules and regulations. The Fort Campbell Contractors Site Specific Spill Contingency Plan shall be completed, turned in as a Submittal, **AND APPROVED BEFORE** any work begins.

2.7.2 If hazardous chemicals or POL spills occur at the job site the Fire department and then the PWBC Environmental Division shall be notified immediately.

2.7.3 No liquids or hazardous waste created or used during construction of the facility shall be deposited in the landfill. Disposal of such waste shall be done in accordance with environmental regulations. Manifests for disposal must be coordinated through the DPW Environmental Division.

2.7.4 The Emergency Planning and Community Right-To-Know Act (EPCRA) requires that site specific information concerning hazardous chemicals use and releases be provided. The Contractor is required to maintain an inventory of hazardous materials. This inventory will be provided to PWBC Environmental Division prior to receipt of final payment.

2.7.5 Inventories of hazardous substances listed in the Act shall include quantities received, amount used, and quantities turned in for disposal. The amount that is not accounted for will be considered as quantities that were released to the environment. Based on this new requirement it is imperative that strict inventory controls be placed on hazardous substances that are being used on Fort Campbell. Questions in reference to the EPCRA can be directed to the Pollution Prevention Branch, Environmental Division, telephone 798-9769.

2.7.6 Contractor shall only perform routine maintenance on equipment at job site as would normally be expected to support normal daily construction activities (exp. addition of lubricants and fuel). Contractor shall take all necessary precautions to insure lubricants and fuel are not introduced into the environment by utilizing drip pans and/or other means to capture spilled or leaking petroleum products. Maintenance on equipment beyond that which would be expected for routine daily upkeep shall be done at the Contractor's facilities, not at the project site.

2.8 SCHEDULE OF WORK: The Contractor shall note the following conditions:

2.8.1 The Contractor shall coordinate all his work and scheduling with the Contracting Officer's Representative (COR). The Contractor shall notify the COR a minimum of forty eight (48) hours in advance of commencing work. (Notification shall be written if fax Contractor shall ensure the COR received notice.)

2.8.2 Coordinate all activities with facility personnel in order to minimize interruption to normal activities.

2.8.3 Contract Period: The contractor shall be required to (a) commence work under this order within 3 calendar days after the order is issued and/or Material Submittals are approved, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than **45 calendar days**. The time stated for completion shall include final cleanup of the premises.

2.9 The Contractor shall be responsible for all damage to premises and structures caused by the Contractor during remediation. Damage shall be repaired to the original condition at the Contractor's expense using original criteria.

3.0 **TECHNICAL CRITERIA:** Technical criteria for the above described work shall be as defined in the Statement of Work, Drawing numbers 7633, NFPA, NEC, Ft. Campbell SOP # 308 and as follows:

3.1 OSHA requirements, regulations and recommendations.

4.0 **SERVICES TO BE PERFORMED:**

4.1 **Cost Proposal:** Include cost breakdown of materials, labor hours, overhead/profit with quote

5.0 **SITE SECURITY AND SAFETY:** Site security shall be in accordance with the Contractor's Site Security plan or as further instructed by the Contracting Officer. Site safety shall be in accordance with EM 385-1-1, OSHA and Safety Plan.

5.1 Provide four copies of written Safety Plan

6.0 **QUALITY CONTROL PLAN:**

6.1 **General:** The Government will consider an interim plan for the first 10 days of operation. However, the contractor shall furnish for approval by the Government, not later than 10 days after receipt of Notice to Proceed, Contractor Quality Control (CQC) Plan with which he proposes to implement the requirements of Contract Clause entitled INSPECTION OF CONSTRUCTION. The plan shall identify personnel, procedures, instructions, records, and forms to be used. If the contractor fails to submit an acceptable QC plan within the time herein prescribed, the Contracting Officer (CO) may refuse to allow construction to start if an acceptable interim plan is not furnished.

6.2 **Coordination Meeting:** Before start of construction, the contractor shall meet with the CO and discuss the contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing administration of the system for both on-site and off-site work and the inter-relationship of contractor's inspection and control with the Government's inspection. A record of the meeting shall be prepared and signed by both the contractor and the CO. The record shall become a part of the contract file. There may also be occasions when subsequent conferences will be called to reconfirm mutual understandings.

6.3 **The Quality Control Plan shall include as a minimum, the following:**

6.3.1 A description of the quality control organization, including chart showing lines of authority and acknowledge that the CQC staff shall conduct the phase inspections for all aspects of the work specified and shall report to the project manager or someone higher in the contractor's organization.

6.3.2 The name, qualifications, duties, responsibilities and authorities each person assigned a QC function.

6.3.3 A copy of the letter to the QC manager signed by an authorized official of the firm, which describes the responsibilities and delegates the authorities of the QC manager, shall be furnished.

6.3.4 Procedures for scheduling and managing submittals, including those of subcontractors, offset fabricators, suppliers and purchasing agents.

6.3.5 Control testing procedures for each specific test. (Laboratory facilities will be approved by the Contracting Officer.)

6.3.6 Reporting procedures including proposed reporting formats.

6.4 **Acceptance of Plan:** Acceptance of the contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The

Government reserves the right to require the contractor to make changes in his CQC plan and operations as necessary to obtain the quality specified.

6.5 Notification of Changes: After acceptance of the QC plan, the contractor shall notify the CO in writing of any proposed change. Proposed changes are subject to acceptance by CO.

6.6 Quality Control Organization:

6.6.1 CQO System Manager: The contractor shall identify an individual within his organization at the site of the work, who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the contractor.

6.6.2 Personnel: A staff shall be maintained under the direction of the system manager to perform all QC activities. The actual strength of the staff during any specific work period may vary to cover work phase needs, shifts, and rates of placement. The personnel of this staff shall be fully qualified by experience and technical training to perform their assigned responsibilities and shall be directly hired by and work for the contractor.

6.6.3 Submittals: Submittals shall be as specified in the SPECIAL PROVISIONS entitled REQUIRED MATERIAL SUBMITTALS. The CQC Organization shall be responsible for certifying that submittals are in compliance with the contract requirements.

6.6.4 Control: Contractor Quality Control is the means by the contractor assures himself that his construction complies with the requirements of the contract plans and specifications. The controls shall be adequate to cover all construction operations, including both on-site and off-site fabrication, and will be keyed to the proposed construction sequence. The controls shall include at least three phases of inspection of all definitive features of work as follows:

6.6.4.1 Preparatory Inspection: This shall be performed prior to beginning any work on any definable feature of work. It shall include a review of contract requirements; a check to assure that all materials and/or equipment have been tested, submitted and approved; a check to assure that provisions have been made to provide required control testing examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials, equipment, and sample work to assure that they conform to approved shop drawings or submittal data and that all materials and/or equipment are on hand. The Contracting Officer Representative (COR) shall be notified at least 72 hours in advance of the preparatory inspection and such inspection shall be made a matter of record in the Contractor's Quality Control documentation as required below. Subsequent to the preparatory inspection and prior to commencement of work, the contractor shall instruct each applicable worker as to the acceptance level of workmanship required in his CQC plan in order to meet contract specifications.

6.6.4.2 Initial Inspections: This shall be performed as soon as a representative portion of the particular feature of work has been accomplished and shall include examination of the quality of workmanship and a review of control testing for compliance with contract requirements, use of defective or damaged materials, omissions, and dimensional requirements. The Contracting Officer's Representative shall be notified at least 24 hours in advance of the initial inspection and such inspection shall be made a matter of record in the CQC documentation as required below.

6.6.4.3 Follow-up Inspections: These shall be performed daily to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. Such inspections shall be made a matter of record in the CQC documentation as required below. Final follow up inspections shall be conducted and test deficiencies corrected prior to the addition of new features of work.

6.7 Tests:

6.7.1 Testing Procedure: The contractor shall perform tests specified or required to verify that control measures are adequate to provide a product which conforms to contract requirements. The contractor shall procure the

services of an industry recognized testing laboratory or he may establish an approved testing laboratory at the project site. A list of tests which the contractor understands he is to perform shall be furnished as a part of the CQC plan to the Contracting Officer. The list shall give the test name, specification paragraph containing the test requirements, and the personnel and laboratory responsible for each type of test. The contractor shall perform the following activities and record and provide the following data:

6.7.1.1 Verify that testing procedures comply with contract requirements.

6.7.1.2 Verify that facilities and testing equipment are available and comply with testing standards.

6.7.1.3 Check test instrument calibration data against certified standards.

6.7.1.4 Verify that recording forms, including all of the test documentation requirements, have been prepared.

7.0 Inspection and Acceptance:

7.1. The Contractor and Contracting Officer Representative (COR) will jointly conduct a pre-final inspection prior to the Contractor requesting a final inspection. Any discrepancies noted shall be corrected prior to the final inspection.

7.2. The Contractor shall request final inspection at least three (3) working days prior to the desired date. If all deficiencies from the pre-final inspection have been corrected the Government will accept the work. If deficiencies have not been corrected or further deficiencies are identified, a timeframe will be agreed upon to correct all deficiencies.

8.0. Liquidated Damages: a. if the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$182.80 for each calendar day of delay until the work is completed or accepted.

b. If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination Clause.

FORT CAMPBELL CONSTRUCTION AND DEMOLITION WASTE INFORMATION

The Woodlawn Construction and Demolition Landfill is located 5.73 miles SW of Gate 10 on 101ST Airborne Division Road. The phone number is 270-956-2468.

Contractors are required to obtain a permit to use Fort Campbell's Construction and Demolition Landfill. Contractors should bring a signed copy of their contract (one page order for supplies/services) to the Environmental Division Solid Waste/Recycling Program (Bldg 2186 on 13 ½ Street) in order to receive a permit. Permits will be valid for the length of the contract. Contractors will be furnished one permit per truck that will unload at the landfill at one time. Contractors are responsible for retaining the permit and ensuring loads delivered under this permit do not include unacceptable materials.

Unacceptable materials include but are not limited to: cardboard, compressed gas cylinders, tires, dead animals, household waste, lunch waste, recyclables, florescent lighting, Petroleum Oil Lubricant products (WD-40 cans), automotive parts, liquids and hazardous wastes (PCB's).

Acceptable materials include: mixed rubble, concrete, wood, roofing, wall board, insulation, carpet, pipe, bricks, lumber, concrete block, metals, wire, fixtures, asphalt, earth, sand, stones.

LANDFILL POLICIES FOR VEHICLE OPERATORS

1. ALL LOADS MUST BE TARPED.
2. 5 MPH BEGINS AT THE GATE. DO NOT CREATE DUST.
3. STOP TRUCK BEFORE PULLING ONTO THE SCALE. USE LOW GEAR WHEN PULLING ONTO THE SCALE.
4. AFTER SECURING THE VEHICLE, BRING LANDFILL ACCESS CARD TO OFFICE WINDOW.
5. WHEN RELEASED BY SCALE OPERATOR, PROCEED TO DISPOSAL AREA.
6. ALL SPECIAL AND HAZARDOUS WASTE REQUIRES 24 HOUR NOTICE. APPROPRIATE PLACARDS ARE REQUIRED FOR SPECIAL/HAZARDOUS WASTE.
7. VEHICLES MUST REMAIN ON ROAD SURFACE AT ALL TIMES. DO NOT DRIVE ON THE GRASS.
8. WEIGH OUT BEFORE LEAVING. DEPART ON GREEN LIGHT.
9. ALL GOVERNMENT LOADS WILL RECEIVE TICKETS.
10. ONLY CONSTRUCTION/DEMOLITION DEBRIS WILL BE ACCEPTED.
11. LANDFILL HOURS ARE 0730 TO 1600 HOURS. LAST LOAD ACCEPTED BY 1530.
12. ANY VEHICLE LEAKS OF COOLANT, OIL OR OTHER PETROLEUM PRODUCTS MUST BE REPORTED IMMEDIATELY TO LANDFILL OFFICE.
13. NO SMOKING IN THE LANDFILL DUE TO THE POSSIBILITY OF THE PRESENCE OF METHANE GAS.
14. ALL VISITORS MUST CHECK-IN WITH THE LANDFILL OFFICE, BLDG 6695.

SECTION 13850A

FIRE DETECTION AND ALARM SYSTEM, DIRECT CURRENT LOOP

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI S3.41(1990; R 2001) Audible Emergency Evacuation Signal (ASA 96)

FM GLOBAL (FM)

FM P7825a(2003) Approval Guide Fire Protection

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C62.41(1991; R 1995) Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 1221(2002) Installation, Maintenance and Use of Emergency Services Communications Systems

NFPA 70(2005) National Electrical Code

NFPA 72(2002) National Fire Alarm Code

NFPA 90A(2002) Installation of Air Conditioning and Ventilating Systems

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

47 CFR 15 Radio Frequency Devices

UNDERWRITERS LABORATORIES (UL)

UL 1242(2000; Rev thru May 2003) Electrical Intermediate Metal Conduit -- Steel

UL 1971(2002; Rev thru May 2004) Signaling Devices for the Hearing Impaired

UL 228(1997; Rev Jan 1999) Door Closers-Holders, With or Without Integral Smoke Detectors

UL 268(1996; Rev thru Oct 2003) Smoke Detectors for Fire Alarm Signaling Systems

UL 268A(1998; Rev thru Apr 2003) Smoke Detectors for Duct Application

UL 38(1999; Rev thru Jun 2001) Manual Signaling Boxes for Fire Alarm Systems

UL 464(2003; Rev thru Oct 2003) Audible Signal Appliances

UL 521(1999; Rev thru Oct 2002) Heat Detectors for Fire Protective Signaling Systems

UL 6(2000; Rev thru May 2003) Rigid Metal Conduit

UL 632(2000) Electrically-Actuated Transmitters

UL 797(2004) Electrical Metallic Tubing -- Steel

UL 864(2003; Rev thru Oct 2003) Control Units and Accessories for Fire Alarm Systems

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Detail Drawings; G

Detail drawings, as specified.

SD-03 Product Data

Storage Batteries; FIO

Substantiating battery calculations for supervisory and alarm power requirements. Ampere-hour requirements for each system component and each panel component, and the battery recharging period shall be included.

Low Battery Voltage; FIO

Voltage drop calculations for notification appliance circuits to indicate that sufficient voltage is available for proper appliance operation.

Spare Parts; FIO

Spare parts data for each different item of material and equipment specified prior to the date of beneficial occupancy. Data shall include a complete list of parts and supplies with the current unit prices and source of supply and a list of the parts recommended by the manufacturer to be replaced after 1 year of service.

Technical Data and Computer Software; G

Technical data which relates to computer software.

Training; G

Lesson plans, operating instructions, maintenance procedures, and training data, furnished in manual format, for the training courses. The operations training shall familiarize designated government personnel with proper operation of the fire alarm system. The maintenance training course shall provide the designated government personnel adequate knowledge required to diagnose, repair, maintain, and expand functions inherent to the system.

Testing; G

Detailed test procedures, prepared and signed by a Registered Professional Engineer or a NICET Level 3 Fire Alarm Technician, for the fire detection and alarm system 14 days prior to performing system tests.

SD-06 Test Reports

Testing; FIO

Test reports, in booklet form, showing field tests performed to prove compliance with the specified performance criteria, upon completion and testing of the installed system. Each test report shall document readings, test results and indicate the final position of controls. The Contractor shall include the NFPA 72 Certificate of Completion and NFPA 72 Inspection and Testing Form, with the appropriate test reports.

SD-07 Certificates

Equipment; G

Certified copies of current approvals or listings issued by an independent test lab if not listed by UL, FM or other nationally recognized testing laboratory, showing compliance with specified NFPA standards.

Qualifications; G

Proof of qualifications for required personnel. The installer shall submit proof of experience for the Professional Engineer, fire alarm technician, and the installing company.

SD-10 Operation and Maintenance Data

Operating and Maintenance Instructions; G

Technical Data and Computer Software; G

Six copies of operating instructions outlining step-by-step procedures required for system startup, operation, and shutdown. The instructions shall include the manufacturer's name, model number, service manual, parts list, and complete description of equipment and their basic operating features. Six copies of maintenance instructions listing routine maintenance procedures, possible breakdowns and repairs, and troubleshooting guide.

The instructions shall include conduit layout, equipment layout and simplified wiring, and control diagrams of the system as installed. The instructions shall include complete procedures for system revision and expansion, detailing both equipment and software requirements. Original and backup copies of all software delivered for this project shall be provided, on each type of media utilized. Instructions shall be approved prior to training.

1.3 GENERAL REQUIREMENTS

1.3.1 Standard Products

Material and equipment shall be the standard products of a manufacturer regularly engaged in the manufacture of the products for at least 2 years prior to bid opening. Equipment shall be supported by a service organization that can provide service within 24 hours of notification.

1.3.2 Nameplates

Major components of equipment shall have the manufacturer's name, address, type or style, voltage and current rating, and catalog number on a noncorrosive and nonheat-sensitive plate which is securely attached to the equipment.

1.3.3 Keys and Locks

Locks shall be keyed alike. Four keys for the system shall be provided.

1.4.4 Tags

Tags with stamped identification number shall be furnished for keys and locks.

1.3.5 Verification of Dimensions

After becoming familiar with details of the work, the Contractor shall verify dimensions in the field and shall advise the Contracting Officer of any discrepancy before performing the work.

1.3.6 Compliance

The fire detection and alarm system and the central reporting system shall be configured in accordance with NFPA 72; exceptions are acceptable as directed by the Contracting Officer. The equipment furnished shall be compatible and be UL listed, FM approved, or approved or listed by a nationally recognized testing laboratory in accordance with the applicable NFPA standards.

1.3.7 Qualifications

1.3.7.1 Engineer and Technician

- a. Registered Professional Engineer with verification of experience and at least 4 years of current experience in the design of the fire protection and detection systems.
- b. National Institute for Certification in Engineering Technologies (NICET) qualifications as an engineering technician in fire alarm systems program with verification of experience and current NICET certificate.
- c. The Registered Professional Engineer may perform all required items under this specification. The NICET Fire Alarm Technician shall perform only the items allowed by the specific category of certification held.

1.3.7.2 Installer

The installing Contractor shall provide the following: A NICET Level 3 Fire Alarm Technician shall supervise the installation of the fire alarm system. NICET Level 2 or higher Fire Alarm Technician shall install and terminate fire alarm devices, cabinets and panels. An electrician or NICET Level 1 Fire Alarm Technician shall install conduit for the fire alarm system. An electrician shall be allowed to install wire or cable and to install conduit for the fire alarm system. The Fire Alarm technicians installing the equipment shall be factory trained in the installation, adjustment, testing, and operation of the equipment specified herein and on the drawings.

1.3.7.3 Design Services

Installations requiring designs or modifications of fire detection, fire alarm, or fire suppression systems shall require the services and review of a qualified fire protection engineer. For the purposes of meeting this requirement, a qualified fire protection engineer is defined as an individual meeting one of the following conditions:

- a. An engineer having a Bachelor of Science or Masters of Science Degree in Fire Protection Engineering from an accredited university engineering program, plus a minimum of 2 years' work experience in fire protection engineering.
- b. A registered professional engineer (P.E.) in fire protection engineering.

- c. A registered PE in a related engineering discipline and member grade status in the National Society of Fire Protection Engineers.
- d. An engineer with a minimum of 10 years' experience in fire protection engineering and member grade status in the National Society of Fire Protection Engineers.

1.3.8 Detail Drawings

The Contractor shall submit detail drawings prepared and signed by a Registered Professional Engineer or a NICET Level 3 Fire Alarm Technician, consisting of a complete list of equipment and material, including manufacturer's descriptive and technical literature, catalog cuts, and installation instructions. Note that the contract drawings show layouts based on typical detectors. The Contractor shall check the layout based on the actual detectors to be installed and make any necessary revisions in the detail drawings. The detail drawings shall also contain complete wiring and schematic diagrams for the equipment furnished, equipment layout, and any other details required to demonstrate that the system has been coordinated and will properly function as a unit. Detailed point-to-point wiring diagram shall be prepared and signed by a Registered Professional Engineer or a NICET Level 3 Fire Alarm Technician showing points of connection. Diagram shall include connections between system devices, appliances, control panels, supervised devices, and equipment that is activated or controlled by the panel.

1.4 SYSTEM DESIGN

1.4.1 Operation

The fire alarm and detection system shall be a complete, supervised fire alarm reporting system. The system shall be activated into the alarm mode by actuation of any alarm initiating device. The system shall remain in the alarm mode until the initiating device is reset and the fire alarm control panel is reset and restored to normal. Alarm initiating devices shall be connected to initiating device circuits (IDC), Style D, in accordance with NFPA 72. Alarm notification appliances shall be connected to notification appliance circuits (NAC), Style Z in accordance with NFPA 72. A looped conduit system shall be provided so that if the conduit and all conductors within are severed at any point, all IDC, or NAC will remain functional. The conduit loop requirement is not applicable to the signal transmission link from the local panels (at the protected premises) to the Supervising Station (fire station, fire alarm central communication center). Textual, audible, and visual appliances and systems shall comply with NFPA 72. Fire alarm system components requiring power, except for the control panel power supply, shall operate on 24 Volts dc.

1.4.2 Operational Features

The system shall have the following operating features:

- a. Monitor electrical supervision of alarm IDC and NAC. Smoke detectors shall not have combined alarm initiating and power circuits.
- b. Monitor electrical supervision of the primary power (ac) supply, battery voltage, placement of alarm zone module (card, PC board) within the control panel, and transmitter tripping circuit integrity.
- c. A trouble buzzer and trouble light emitting diode (LED) to activate upon a single break, open, or ground fault condition which prevents the required normal operation of the system. The trouble signal shall also operate upon loss of primary power (ac) supply, low battery voltage, removal of alarm zone module (card, PC board), and disconnection of the circuit used for transmitting alarm signals off-premises. A trouble alarm silence switch shall be provided which will silence the trouble buzzer, but will not extinguish the trouble indicator LED. Subsequent trouble and supervisory alarms shall sound the trouble signal until silenced. After the system returns to normal operating conditions, the trouble buzzer shall again sound until the silencing switch returns to normal position, unless automatic trouble reset is provided.

- d. A one person test mode. Activating an initiating device in this mode will activate an alarm for a short period of time, then automatically reset the alarm, without activating the transmitter during the entire process.
- e. A transmitter disconnect switch to allow testing and maintenance of the system without activating the transmitter but providing a trouble signal when disconnected and a restoration signal when reconnected.
- f. Evacuation alarm silencing switch which, when activated, will silence alarm devices, but will not affect the zone indicating LED/LCD nor the operation of the transmitter. This switch shall be over-ridden upon activation of a subsequent alarm from an unalarmed zone and the NAC devices will be activated.
- g. Electrical supervision for circuits used for supervisory signal services (i.e., sprinkler systems, valves, etc.). Supervision shall detect any open, short, or ground.
- h. Confirmation or verification modules for smoke detection initiating circuits. The modules shall interrupt the transmission of an alarm signal to the system control panel for a factory preset period. This interruption period shall be adjustable from 1 to 60 seconds and be factory set at 20 seconds. Immediately following the interruption period, a confirmation period shall be in effect during which time an alarm signal, if present, will be sent immediately to the control panel. Fire alarm devices, other than smoke detectors, will be prohibited on circuits controlled by confirmation or verification modules.
- i. The fire alarm control panel shall provide supervised relays for HVAC shutdown. An override at the HVAC panel shall not be provided.
- j. Provide one person test mode - Activating an initiating device in this mode will activate an alarm for a short period of time, then automatically reset the alarm, without activating the transmitter during the entire process.
- k. The fire alarm control panel shall provide the required monitoring and supervised control outputs needed to accomplish elevator recall.
- l. The fire alarm control panel shall provide the required modules to monitor and control the fire sprinkler system, or other fire protection extinguishing system.
- m. Zones for alarm IDC and NAC shall be arranged as indicated on the contract drawings.
- n. The fire alarm control panel shall be readily capable of future expansion and modification by qualified technicians. Examples of required changes are: adding or deleting devices or zones; changing system responses to particular input signals; programming certain input signals to activate auxiliary devices.

1.4.3 Alarm Functions

An alarm condition on a circuit shall automatically initiate the following functions:

- a. Transmission of a signal over the station radio fire reporting system. The signal shall be common for all zones.
- b. Visual indications of the alarmed zone or zones on the fire alarm control panel annunciator.
- c. Continuous sounding or operation of alarm notification appliances throughout the building as required by ANSI S3.41.
- d. Closure of doors held open by electromagnetic devices.
- e. Operation of the smoke control system.
- f. Deactivation of the air handling units throughout the building.

g. Shutdown of power to the data processing equipment in the alarmed zones.

1.4.4 Primary Power

Operating power shall be provided as required by paragraph Power Supply for the System. Transfer from normal to emergency power or restoration from emergency to normal power shall be fully automatic and not cause transmission of a false alarm. Loss of ac power shall not prevent transmission of a signal via the fire reporting system upon operation of any initiating circuit.

1.4.5 Battery Backup Power

Battery backup power shall be through use of rechargeable, sealed-type storage batteries and battery charger.

1.4.6 Interface With Existing Fire Alarm Equipment

The equipment specified herein shall operate as an extension to an existing configuration. The new equipment shall be connected to a King Fisher Transmitter. The Government will provide a King Fisher Transmitter and the contractor shall provide the necessary labor and material to install, connect and operate

1.5 TECHNICAL DATA AND COMPUTER SOFTWARE

Technical data and computer software (meaning technical data which relates to computer software) which is specifically identified in this project, and which may be defined/required in other specifications, shall be delivered in accordance with the CONTRACT CLAUSES, and in accordance with the Contract Data Requirements List, DD Form 1423. Data delivered shall be identified by reference to the particular specification paragraph against which it is furnished. Data to be submitted shall include complete system, equipment, and software descriptions. Descriptions shall show how the equipment will operate as a system to meet the performance requirements of this contract. The data package shall also include the following:

- (1) Identification of programmable portions of system equipment and capabilities.
- (2) Description of system revision and expansion capabilities and methods of implementation detailing both equipment and software requirements.
- (3) Provision of operational software data on all modes of programmable portions of the fire alarm and detection system.
- (4) Description of Fire Alarm Control Panel equipment operation.
- (5) Description of auxiliary and remote equipment operations.
- (6) Library of application software.
- (7) Operation and maintenance manuals described under SD-19 in the SUBMITTALS paragraph.

1.6 DELIVERY AND STORAGE

Equipment delivered and placed in storage shall be stored with protection from the weather, humidity and temperature variation, dirt, dust, and any other contaminants.

PART 2 PRODUCTS

2.1 CONTROL PANEL

Control panel shall comply with the applicable requirements of UL 864. Panel shall be modular, installed in a flush, surface, or semi-flush mounted steel cabinet with hinged door and cylinder lock. (The majority of Fort Campbell installations will be surface mounted) Control panel shall be a clean, uncluttered, and orderly assembled panel containing components and equipment required to provide the specified operating and supervisory functions of the system. The panel shall have prominent rigid plastic, phenolic or metal identification plates for LEDs, zones, controls, meters, fuses, and switches. Nameplates for fuses shall also include ampere rating. Separate alarm and trouble LEDs shall be provided for each zone alarm. These LEDs shall be located on the exterior of the cabinet door or be visible through the cabinet door. Control panel switches shall be within the locked cabinet. A suitable means (single operation) shall be provided for testing the control panel visual indicating devices (meters or LEDs). Meters and LEDs shall be plainly visible when the cabinet door is closed. Signals and LEDs shall be provided to indicate by zone any alarm, supervisory or trouble condition on the system. Each IDC shall be powered and supervised so that a signal on one zone does not prevent the receipt of signals from other zones. Loss of power, including batteries, shall not require the reloading of a program. Upon restoration of power, startup shall be automatic, and shall not require any manual operation. The loss of primary power or the sequence of applying primary or emergency power shall not affect the transmission of alarm, supervisory or trouble signals. Visual annunciators shall be provided for each active zone and spare zone. One spare zones shall be provided. Each LED shall provide specific identification of the zone by means of a permanently attached rigid plastic, phenolic, or metal sign with either raised or engraved letters. Zone identification shall consist of a word description of the zone. Cabinets shall be provided with ample gutter space to allow proper clearance between the cabinet and live parts of the panel equipment. If more than one modular unit is required to form a control panel, the units shall be installed in a single cabinet large enough to accommodate units.

2.1.1 Remote System Trouble Audible/Visual Appliance

Audible appliance shall have a minimum sound level output rating of 85 dBA at 3.05 m 10 feet and operate in conjunction with the panel's integral trouble signal. The audible device shall be silenced by a system trouble silence switch located at the remote location, but shall not extinguish the visual indicator. A rigid plastic, phenolic or metal identification sign which reads "Fire Alarm System Trouble" shall be provided at the audible appliance. The visual appliance located with the audible appliance shall not be extinguished until the trouble has been cleared.

2.1.2 Circuit Connections

Circuit conductors entering or leaving the panel shall be connected to screw-type terminals with each conductor and terminal marked for identification.

2.1.3 System Expansion and Modification Capabilities

Any equipment and software needed or that may be used by qualified technicians to implement future changes to the fire alarm system shall be provided as part of this contract.

2.2 STORAGE BATTERIES

Storage batteries shall be provided and shall be 24 Vdc sealed, lead-calcium type requiring no additional water. The batteries shall have ample capacity, with primary power disconnected, to operate the fire alarm system for a period of 72 hours. Following this period of battery operation, the batteries shall have ample capacity to operate all components of the system, including all alarm signaling devices in the total alarm mode for a minimum period of 15 minutes. Batteries shall be located either at the bottom of the panel or in a separate battery cabinet. Batteries shall be provided with overcurrent protection in accordance with NFPA 72. Separate battery cabinets shall have a lockable, hinged cover similar to the fire alarm panel. The lock shall be keyed the same as the fire alarm control panel. Cabinets shall be painted to match the fire alarm control panel.

2.3 BATTERY CHARGER

Battery charger shall be completely automatic, 24 Vdc with high/low charging rate, capable of restoring the batteries from full discharge (18 Volts dc) to full charge within 48 hours. A pilot light indicating when batteries are manually placed on a high rate of charge shall be provided as part of the unit assembly, if a high rate switch is provided. Charger shall be located in control panel cabinet or in a separate battery cabinet.

2.4 MANUAL FIRE ALARM STATIONS

Manual fire alarm stations shall conform to the applicable requirements of UL 38. Manual stations shall be connected into signal line circuits. Stations shall be installed on surface, semi-flush, or flush mounted outlet boxes dependant on the individual circumstances. Manual stations shall be mounted at 1370 mm (48 inches). Stations shall be single or double action type. Stations shall be finished in red, with raised letter operating instructions of contrasting color. Stations requiring the breaking of glass or plastic panels for operation are not acceptable. Stations employing glass rods are not acceptable. The use of a key or wrench shall be required to reset the station. Gravity or mercury switches are not acceptable. Switches and contacts shall be rated for the voltage and current upon which they operate. Stations shall have a separate screw terminal for each conductor. Surface mounted boxes shall be matched and painted the same color as the fire alarm manual stations.

2.5 FIRE DETECTING DEVICES

Fire detecting devices shall comply with the applicable requirements of NFPA 72, NFPA 90A, UL 268, UL 268A, and UL 521. The detectors shall be provided as indicated. Detector base shall have screw terminals for making connections. No solder connections will be allowed. Detectors located in concealed locations (above ceiling, raised floors, etc.) shall have a remote visible indicator LED/LCD. Installed devices shall conform to the NFPA 70 hazard classification of the area where devices are to be installed.

2.5.1 Heat Detectors

Heat detectors shall be designed for detection of fire by combination fixed temperature and rate-of-rise principle. Heat detector spacing shall be rated in accordance with UL 521. Detectors located in areas subject to moisture, exterior atmospheric conditions, or hazardous locations as defined by NFPA 70 shall be types approved for such locations. Heat detectors located in attic spaces or similar concealed spaces below the roof shall be intermediate temperature rated.

2.5.1.1 Combination Fixed-Temperature and Rate-of-Rise Detectors

Detectors shall be designed for surface or semi-flush outlet box mounting and supported independently of wiring connections. Contacts shall be self-resetting after response to rate-of-rise principle. Under fixed temperature actuation, the detector shall have a permanent external indication which is readily visible. Detector units located in boiler rooms, showers, or other areas subject to abnormal temperature changes shall operate on fixed temperature principle only. The UL 521 test rating for the fixed temperature portion shall be 57.2 degrees C (135 degrees F) unless otherwise directed in the specifications. The UL 521 test rating for the Rate-of-Rise detectors shall be rated for 15 by 15 m (50 by 50 ft).

2.5.1.2 RESERVED

2.5.1.3 Fixed Temperature Detectors

Detectors shall be designed for surface or semi-flush outlet box mounting and supported independently of wiring connections. Detectors shall be designed to detect high heat. The detectors shall have a specific temperature setting of 57.2 degrees C (135 degrees F) or as shown/indicated. The UL 521 test rating for the fixed temperature detectors shall be rated for 4.57 by 4.57 m (15 by 15 ft).

2.5.2 Smoke Detectors

Smoke detectors shall be designed for detection of abnormal smoke densities. Smoke detectors shall be ionization or photoelectric type. Detectors shall contain a visible indicator LED that shows when the unit is in alarm condition. Detectors shall not be adversely affected by vibration or pressure. Detectors shall be the plug-in type in which the detector base contains terminals for making wiring connections. Detectors that are to be installed in concealed (above false ceilings, etc.) locations shall be provided with a remote indicator LED suitable for mounting in a finished, visible location.

2.5.2.1 Ionization Detectors

Ionization detectors with a dual chamber shall be responsive to both invisible and visible particles of combustion. One chamber shall be a reference chamber and the second a sampling chamber. Detectors containing radium shall not be provided. Detectors shall not cause an alarm condition due to anticipated fluctuations in relative humidity. The sensitivity of the detector shall be field adjustable to compensate for operating conditions. Detector shall require no replacement or readjustment to restore it to normal operation after an alarm condition. Each detector shall be capable of withstanding ambient air velocity up to 1.5 meters/second (300 fpm) in accordance with UL 268.

2.5.2.2 Photoelectric Detectors

Detectors shall operate on a light scattering concept using an LED light source. Failure of the LED shall not cause an alarm condition. Detectors shall be factory set for sensitivity and shall require no field adjustments of any kind. Detectors shall have an obscuration rating in accordance with UL 268.

2.5.2.3 RESERVED

2.5.2.4 Duct Detectors

Duct-mounted photoelectric smoke detectors shall be furnished and installed where indicated and in accordance with NFPA 90A. Units shall consist of a smoke detector as specified in paragraph Photoelectric Detectors, mounted in a special housing fitted with duct sampling tubes. Detector circuitry shall be mounted in a metallic enclosure exterior to the duct. Detectors shall have a manual reset. Detectors shall be rated for air velocities that include air flows between 2.5 and 20 m/s (500 and 4000 fpm) or greater in some instances. Detectors shall be powered from the fire alarm panel. Sampling tubes shall run the full width of the duct. The duct detector package shall conform to the requirements of NFPA 90A, UL 268A, and shall be UL listed for use in air-handling systems. The control functions, operation, reset, and bypass shall be controlled from the fire alarm control panel. Lights to indicate the operation and alarm condition; and the test and reset buttons shall be visible and accessible with the unit installed and the cover in place. Detectors mounted above 1.83 m (6 feet) and those mounted below 1.83 m (6 feet) that cannot be easily accessed while standing on the floor, shall be provided with a remote detector indicator panel containing test and reset switches. Remote lamps and switches as well as the affected fan units shall be properly identified in etched plastic placards. Detectors shall have auxiliary contacts to provide control, interlock, and shutdown functions specified in Section 15951 DIRECT DIGITAL CONTROL FOR HVAC AND OTHER LOCAL BUILDING SYSTEMS. The detectors shall be supplied by the fire alarm system manufacturer to ensure complete system compatibility.

2.5.3 RESERVED

2.5.4 RESERVED

2.6 NOTIFICATION APPLIANCES

Audible appliances shall conform to the applicable requirements of UL 464. Devices shall be connected into notification appliance circuits. Devices shall have a separate screw terminal for each conductor. Audible appliances shall generate a unique audible sound from other devices provided in the building and surrounding area.

Surface mounted audible appliances shall be painted red or white. Recessed audible appliances shall be installed with a grill that is painted red or white.

2.6.1 Alarm Bells

Bells shall be surface mounted with the matching mounting back box surface mounted. Bells shall be suitable for use in an electrically supervised circuit. Bells shall be the underdome type producing a minimum output rating of 85 dBA at 3.05 m (10 feet). Bells used in exterior locations shall be specifically listed or approved for outdoor use and be provided with metal housing and protective grilles. Single stroke, electrically operated, supervised solenoid bells shall be used for coded applications.

2.6.2 Alarm Horns

Horns shall be surface mounted, with the matching mounting back box surface mounted or recessed single or double projector type suitable for use in an electrically supervised circuit. Horns shall produce a sound rating of at least 85 dBA at 3.05 m (10 feet). Horns used in exterior locations shall be specifically listed or approved for outdoor use and be provided with metal housing and protective grilles.

2.6.3 Chimes

Chimes shall be electrically operated, supervised, electronic type, with an adjustable frequency of 800 to 1200 Hertz. Chimes shall have a minimum sound rating of 80 dBA at 3.05 m (10 feet).

2.6.4 Visual Notification Appliances

Visual notification appliances shall conform to the applicable requirements of UL 1971. Appliances shall have clear high intensity optic lens, xenon flash tubes, and output white light. Strobe flash rate shall be between 1 to 3 flashes per second and a minimum of 75 candela. Strobe shall be surface or semi-flush mounted.

2.6.5 Combination Audible/Visual Notification Appliances

Combination audible/visual notification appliances shall provide the same requirements as individual units, except that they shall mount as a unit in standard backboxes. Units shall be factory assembled. Any other audible notification appliance employed in the fire alarm systems shall be approved by the Contracting Officer.

2.7 REMOTE ANNUNCIATION EQUIPMENT

2.7.1 There shall not be a Remote Annunciator

2.8 FIRE DETECTION AND ALARM SYSTEM PERIPHERAL EQUIPMENT

2.8.1 Electromagnetic Door Hold-Open Devices

Devices shall be attached to the walls unless otherwise indicated. Devices shall comply with the appropriate requirements of UL 228. Devices shall operate on 24 Volt dc power. Compatible magnetic component shall be attached to the door. Under normal conditions, the magnets shall attract and hold the doors open. When magnets are de-energized, they shall release the doors. Magnets shall have a holding force of 111.2 N (25 pounds). Devices shall be UL or FM approved. Housing for devices shall be brushed aluminum or stainless steel. Operation shall be fail safe with no moving parts. Electromagnetic door hold-open devices shall not be required to be held open during building power failure.

2.8.2 Conduit

Conduit and fittings shall comply with UL 6, UL 1242 and UL 797.

2.8.3 Wiring

Wiring shall conform to NFPA 70. Wiring for 120 Vac power shall be No. 12 AWG minimum. Wiring for Fire Alarm circuits shall be No. 16 AWG minimum. Voltages shall not be mixed in any junction box, housing, or device, except those containing power supplies and control relays. Wiring shall conform to NFPA 70. System field wiring shall be solid copper and installed in metallic conduit or electrical metallic tubing, except rigid plastic conduit may be used under slab-on-grade. Conductors shall be color coded. Conductors used for the same functions shall be similarly color coded. Wiring code color shall remain uniform throughout the circuit. Pigtail or T-tap connections to initiating device circuits, supervisory alarm circuits, and notification appliance circuits are prohibited.

2.8.4 Special Tools and Spare Parts

Software, connecting cables and proprietary equipment, necessary or usable for the maintenance, testing, and reprogramming of the equipment shall be furnished to the Contracting Officer. Two spare fuses of each type and size required shall be furnished. Two percent of the total number of each different type of detector, but no less than two each, shall be furnished. Spare fuses shall be mounted in the fire alarm panel.

2.9 TRANSMITTERS

2.9.1 Radio Alarm Transmitters

Transmitters shall be Government furnished and Contractor installed.

2.9.1.1 Transmitter Power Supply

Each radio alarm transmitter shall be powered by a combination of locally available 120-volt ac power and a sealed, lead-calcium battery.

2.9.1.2 Radio Alarm Transmitter Housing

2.9.1.3 Antenna

The Contractor shall provide the appropriate size and type coax as directed by the manufacture's written installation instructions.

PART 3 EXECUTION

3.1 INSTALLATION

All work shall be installed as shown, and in accordance with NFPA 70 and NFPA 72, and in accordance with the manufacturer's diagrams and recommendations, unless otherwise specified. Smoke detectors shall not be installed until construction is essentially complete and the building has been thoroughly cleaned.

3.1.1 Power Supply for the System

A single dedicated circuit connection for supplying power from a branch circuit to each building fire alarm system shall be provided. The power shall be supplied as shown on the drawings. The power supply shall be equipped with a locking mechanism and marked in red with the words "FIRE ALARM CIRCUIT CONTROL".

3.1.2 Wiring

Conduit size for wiring shall be in accordance with NFPA 70. Wiring for the fire alarm system shall not be installed in conduits, junction boxes, or outlet boxes with conductors of lighting and power systems. Not more than two conductors shall be installed under any device screw terminal. The wires under the screw terminal shall be straight when placed under the terminal then clamped in place under the screw terminal. The wires shall be broken and not twisted around the terminal. Circuit conductors entering or leaving any mounting box, outlet box enclosure, or cabinet shall be connected to screw terminals with each terminal and conductor marked in accordance with the wiring diagram. Connections and splices shall be made using screw terminal blocks. The use of wire nut type connectors in the system is prohibited. Wiring within any control equipment shall be readily accessible without removing any component parts. The fire alarm equipment manufacturer's representative shall be present for the connection of wiring to the control panel.

3.1.3 Control Panel

The control panel and its assorted components shall be mounted so that no part of the enclosing cabinet is less than 300 mm (12 inches) nor more than 2000 mm (78 inches) above the finished floor. Manually operable controls shall be between 900 and 1100 mm (36 and 42 inches) above the finished floor. Panel shall be installed to comply with the requirements of UL 864.

3.1.4 Detectors

Detectors shall be located and installed in accordance with NFPA 72. Detectors shall be connected into signal line circuits or initiating device circuits as indicated on the drawings. Detectors shall be at least 300 mm (12 inches) from any part of any lighting fixture. Detectors shall be located at least 900 mm (3 feet) from diffusers of air handling systems. Each detector shall be provided with appropriate mounting hardware as required by its mounting location. Detectors which mount in open space shall be mounted directly to the end of the stubbed down rigid conduit drop. Conduit drops shall be firmly secured to minimize detector sway. Where length of conduit drop from ceiling or wall surface exceeds 900 mm (3 feet), sway bracing shall be provided. Detectors installed in concealed locations (above ceiling, raised floors, etc.) shall have a remote visible indicator LED/LCD in a finished, visible location.

3.1.5 Notification Appliances

Notification appliances shall be mounted 2003 mm (80 inches) above the finished floor or 150 mm (6 inches) below the ceiling, whichever is lower.

3.1.6 RESERVED

3.1.7 Supervisory and Alarm Contacts

Contacts in suppression systems and other fire protection subsystems shall be connected to the fire alarm system to perform supervisory and alarm functions as identified in NFPA 72 and as indicated on the drawings.

3.2 OVERVOLTAGE AND SURGE PROTECTION

3.2.1 Power Line Surge Protection

All equipment connected to alternating current circuits shall be protected from surges per IEEE C62.41 B3 combination waveform and NFPA 70. Fuses shall not be used for surge protection. The surge protector shall be rated for a maximum let thru voltage of 350 Volts ac (line-to-neutral) and 350 Volt ac (neutral-to-ground).

3.2.2 Low Voltage DC Circuits Surge Protection

All IDC, NAC, and communication cables/conductors, except fiber optics, shall have surge protection installed at each point where it exits or enters a building. Equipment shall be protected from surges per IEEE C62.41B3

combination waveform and NFPA 70. The surge protector shall be rated to protect the 24 Volt dc equipment. The maximum dc clamping voltages shall be 36 V (line-to-ground) and 72 Volt dc (line-to-line).

3.3 GROUNDING

Grounding shall be provided by connecting to building ground system and as indicated in the specifications or drawings.

3.4 RESERVED

3.5 TESTING

The Contractor shall notify the Contracting Officer at least 10 days before the preliminary and acceptance tests are to be conducted. The tests shall be performed in accordance with the approved test procedures in the presence of the Contracting Officer. The control panel manufacturer's representative shall be present to supervise tests. The Contractor shall furnish instruments and personnel required for the tests.

3.5.1 Preliminary Tests

Upon completion of the installation, the system shall be subjected to functional and operational performance tests including tests of each installed initiating and notification appliance, when required. Tests shall include the meggering of system conductors to determine that the system is free from grounded, shorted, or open circuits. The megger test shall be conducted prior to the installation of fire alarm equipment. If deficiencies are found, corrections shall be made and the system shall be retested to assure that it is functional. After completing the preliminary testing the Contractor shall complete and submit the NFPA 72, Certificate of Completion.

3.5.2 Acceptance Test

Acceptance testing shall not be performed until the Contractor has completed and submitted the Certificate of Completion. Testing shall be in accordance with NFPA 72. The recommended tests in NFPA 72 shall be considered mandatory and shall verify that previous deficiencies have been corrected. The Contractor shall complete and submit the NFPA 72, Inspection and Testing Form. The test shall include all requirements of NFPA 72 and the following:

- a. Test of each function of the control panel.
- b. Test of each circuit in both trouble and normal modes.
- c. Tests of each alarm initiating devices in both normal and trouble conditions.
- d. Tests of each control circuit and device.
- e. Tests of each alarm notification appliance.
- f. Tests of the battery charger and batteries.
- g. Complete operational tests under emergency power supply.
- h. Visual inspection of wiring connections.
- i. Opening the circuit at each alarm initiating device and notification appliance to test the wiring supervisory feature.
- j. Ground fault.

k. Short circuit faults.

l. Stray voltage.

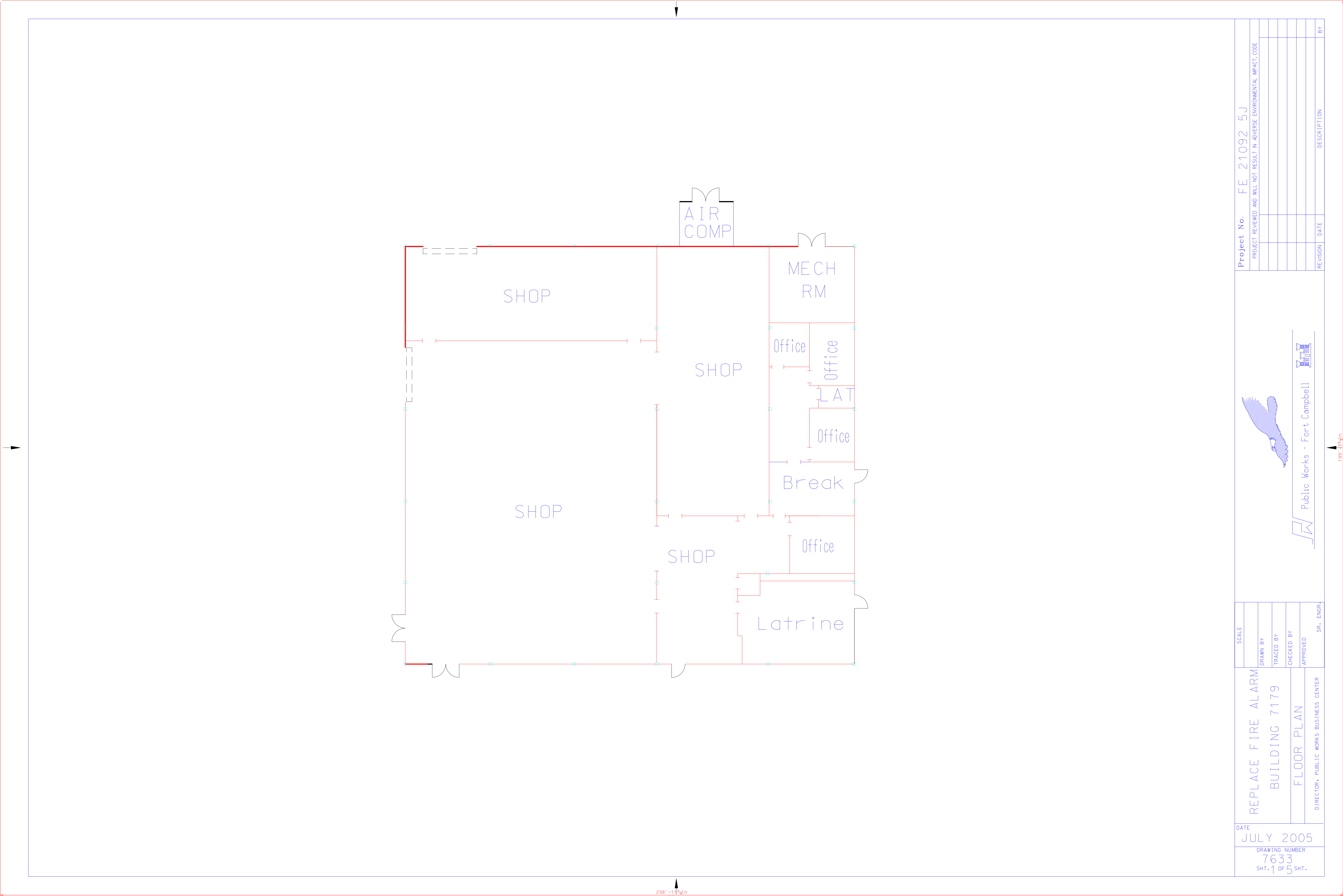
m. Loop resistance.

3.6 TRAINING

Training course shall be provided for the operations and maintenance staff. The course shall be conducted in the building where the system is installed or as designated by the Contracting Officer. The training period for systems operation shall consist of 2 training days (4 hours per day) and shall start after the system is functionally completed but prior to final acceptance tests. The training period for systems maintenance shall consist of 2 training days (4 hours per day) and shall start after the system is functionally completed but prior to final acceptance tests. NOTE: Operation and Maintenance Training be done concurrently. The instructions shall cover items contained in the operating and maintenance instructions.


SUBMITTAL REGISTER Replace Existing 115 Volt Fire Alarm System, Building 7179 PROJECT NO. FE 10267 5J								
SUBMITTAL No	PARA No.	DESCRIPTION	DATE			RESUBMIT Y/N	RESUBMIT APPROVAL DATE	COMMENT
			CTR TO DOC	DOC TO DPW	DPW TO DOC			
	1.3	Alarm Panel, including Installation manuals						
	1.6	Smoke Detectors						
	1.6	Heat Detectors						
	1.6	Pull Stations						
	1.6	Strobe Devices						
	1.6	Audible Devices						
	1.11	Spill Plan						
	2.3	Electric Permit						
	1.12	Fire Alarm Certification per NFPA 72						
	1.13	As-built drawings						
	1.14	Programming software						
	1.15	Cables, adaptor, key or other						
	5.1	Safety Plan						
	6.0	Quality Control Plan						
		SECTION 13850A						
	SD 02	Shop Drawings						
	SD 03	Product Data						
	SD 06	Test Reports						
	SD 07	Certificates						
	SD 10	Operation and Data						


This register is not complete. Contractor is responsible to ensure the Government understands his intentions and product intended to be used.



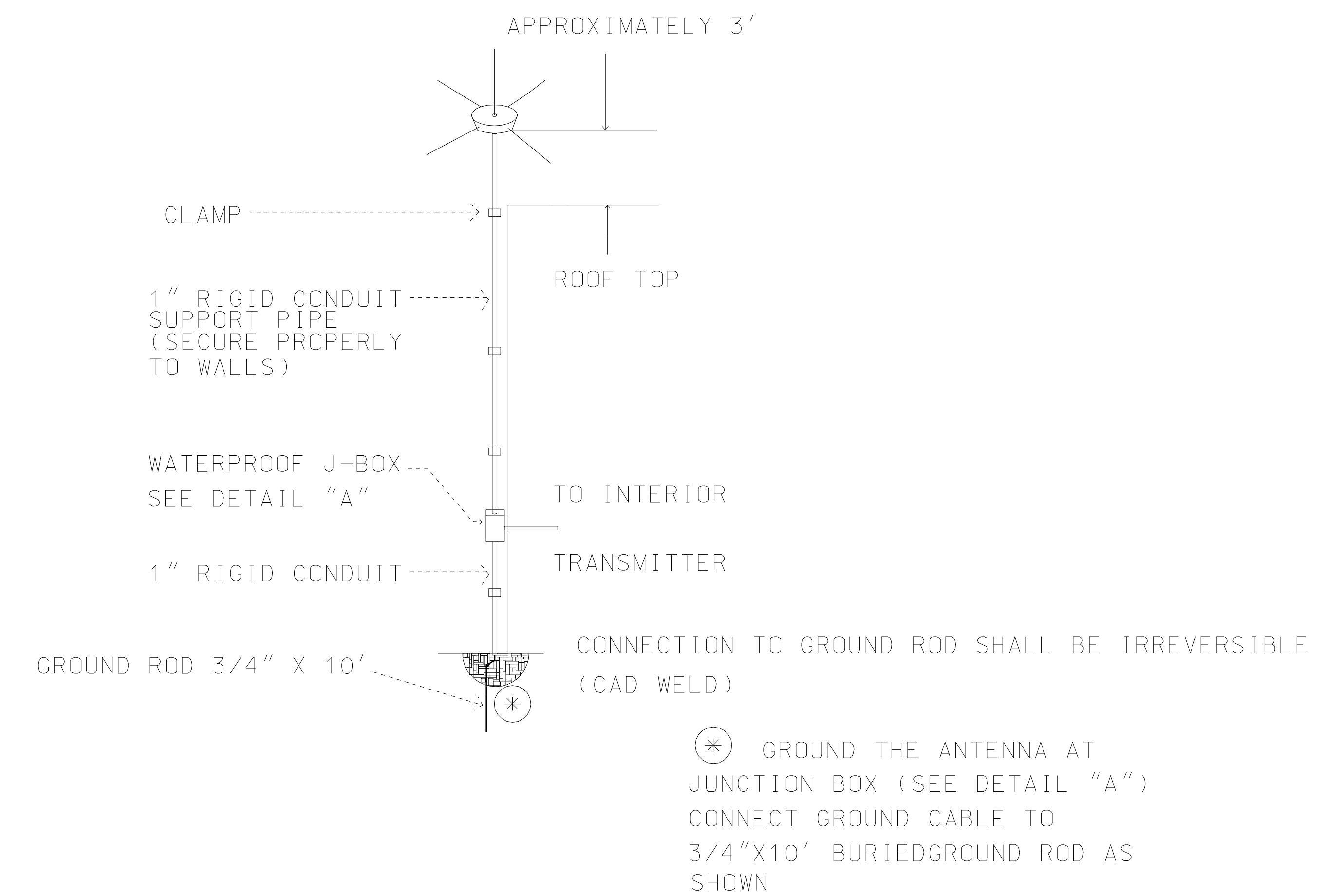
REPLACE FIRE ALARM		SCALE	Project No. FE 21092 5J	
BUILDING 7179		DRAWN BY	PROJECT REVIEWED AND WILL NOT RESULT IN ADVERSE ENVIRONMENTAL IMPACT, CODE	
FLOOR PLAN		TRACED BY		
DIRECTOR, PUBLIC WORKS BUSINESS CENTER		CHECKED BY		
		APPROVED		
DATE			REVISION	DATE
JULY 2005				
DRAWING NUMBER				DESCRIPTION
7633				
SHT. 1 OF 5 SHT.				BY

Public Works - Fort Campbell

- | | | | | |
|--|--|---|---|-------------|
| REPLACE FIRE ALARM | | SCALE | Project No. FE 21092 5J | |
| BUILDING 7179 | | DRAWN BY B. DOLL | PROJECT REVIEWED AND WILL NOT RESULT IN ADVERSE ENVIRONMENTAL IMPACT CODE | |
| Fire Alarm Plan | | TRACED BY | | |
| DIRECTOR, PUBLIC WORKS BUSINESS CENTER | | CHECKED BY | | |
| | | APPROVED | | |
| DATE JULY 2005 | | 
Public Works - Fort Campbell | | |
| DRAWING NUMBER 7633 | | REVISION | | DATE |
| SHT. 2 OF 5 | | | | DESCRIPTION |
| | | | | BY |



Public Works - Fort Campbell



Typical Fire Alarm and Transmitter Wiring

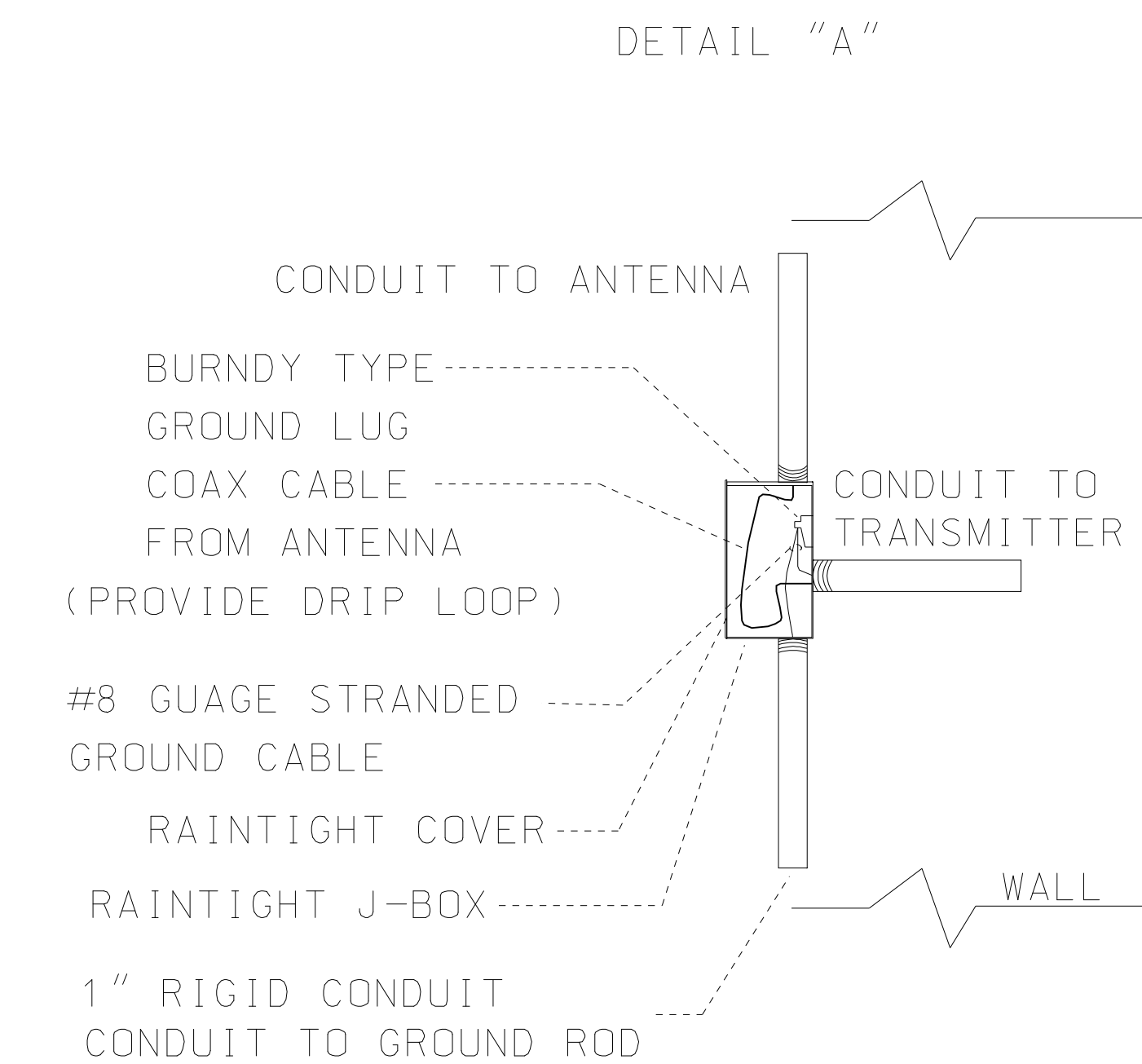
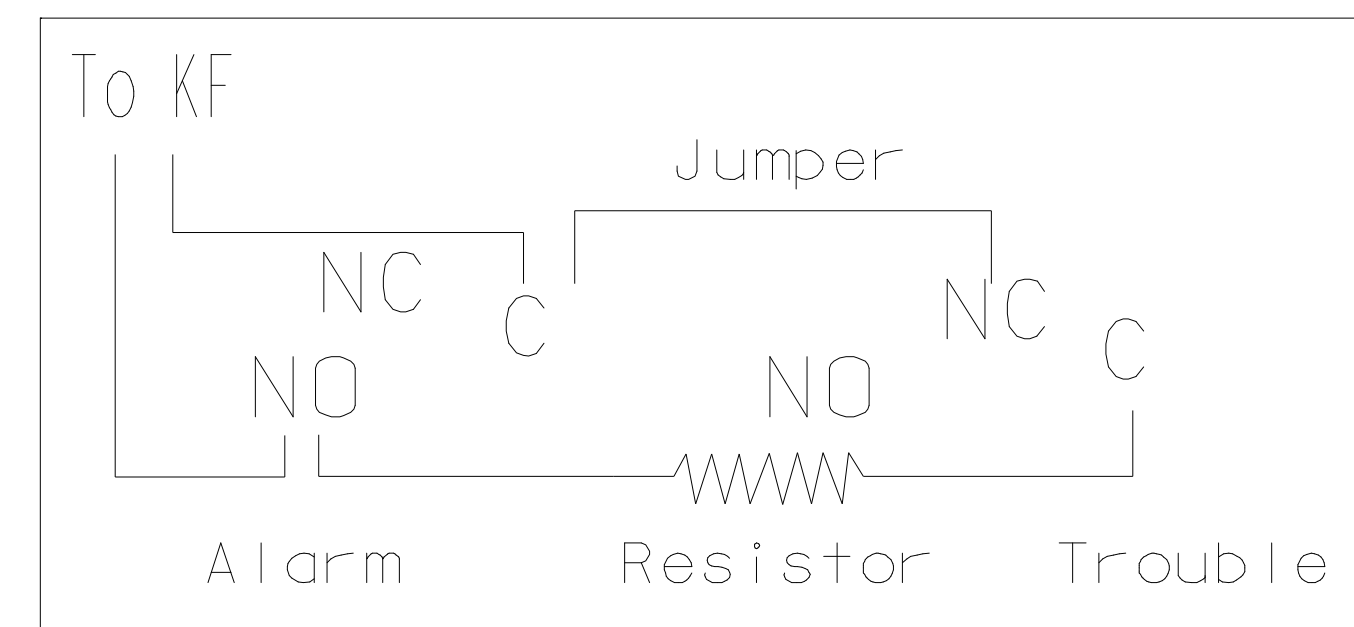
Connecting to the Transmitter

Cut Resistors 57 & 58

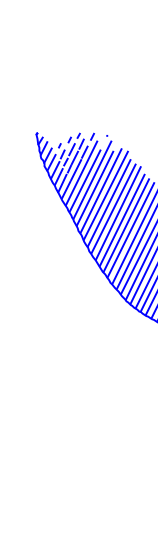
(Note one will already be cut)

Place 6.8 Resistor on Normally Open - on Alarm & Common on Trouble
Jumper - Common on Alarm & Normally Closed on Trouble

The King-Fisher Wires go on Normally Open & Common on Alarm



KING FISHER TRANSMITTER

FORT CAMPBELL, KY KING FISHER INSTALLATION		SCALE	<div><p>Public Works - Fort Campbell</p></div>	Project No.	FE 21092 5J	
Transmitter		DRAWN BY		PROJECT REVIEWED AND WILL NOT RESULT IN ADVERSE ENVIRONMENTAL IMPACT, CODE		
		TRACED BY				
		CHECKED BY				
		APPROVED				
DIRECTOR, PUBLIC WORKS BUSINESS CENTER		SR., ENGR.	REVISION	DATE	DESCRIPTION	BY
DATE July 2005		DRAWING NUMBER 7633 SHT. 5 OF 5 SHT.				